

Energy Efficiency – What's in it for Utah?

Utah Energy Forum

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ETC Group

- Engineering consultants (mechanical, electrical, chemical)

dedicated to improving the energy efficiency of commercial and industrial businesses and to reducing the impact of energy use on the environment through engineering, analysis, education, and advocacy.

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How big is the market?

- Major players:
 - Rocky Mountain Power
 - Questar
 - Engineering consultants
 - Equipment vendors and contractors
 - Energy Service Companies
 - Homes and businesses that buy energy

The Utilities

- Rocky Mountain Power and Questar:
 - Manage multiple demand side management (energy efficiency) programs
 - Spending ratepayer dollars
 - Incentives and load control programs
- Participant spend their own money as well
- Other non-utility related investments in efficiency

Rocky Mountain Power

Expenditures in Millions

			<i>Estimated</i>	
	2007	2008	2009	2010
Utility	\$ 28.6	\$ 35.0	\$ 43.1	\$ 53.0
<i>Incentives (~49%)</i>	\$ 14.0	\$ 17.1	\$ 21.1	\$ 25.9
Customer	\$ 27.9	\$ 37.7	\$ 46.3	\$ 57.0
Total	\$ 56.5	\$ 72.7	\$ 89.4	\$109.9

Questar

Expenditures in Millions

			<i>Estimated</i>	
	2007	2008	2009	
Utility	\$ 7.4	\$ 16.0	\$ 17.8	
Customer	\$ 7.2	\$ 15.6	\$ 17.4	
Total	\$ 14.6	\$ 31.6	\$ 35.2	

Customer Savings

Customer Annual Savings				
			<i>Estimated</i>	
	2007	2008	2009	2010
MWH	149,000	180,000	221,400	272,322
Dth	393,000	393,000		
Electric Bills	\$ 8.7	\$ 10.7	\$ 13.2	\$ 16.2
Natural Gas Bills	\$ 2.7	\$ 3.7		
Total Bill Savings	\$ 11.4	\$ 14.4	\$ 13.2	\$ 16.2

Economic Benefits

The Economy				
\$ in Millions			Estimated	
	2007	2008	2009	2010
Gross economic benefit	\$ 135.5	\$ 195.5	\$ 233.4	\$ 204.7
Net economic benefit	\$ 64.4	\$ 91.2	\$ 108.9	\$ 94.7
New jobs	304	430	513	447

Projected using Energy Trust of Oregon Economic benefits study

Jobs

- The current industry is resource constrained – i.e., there aren't enough well educated and trained people to meet the demand.

Examples of Success

Customer/Project	kWh saved	Dth saved	Bill savings	Customer cost	Utility incentive	Payback after incentive	ROI
Coal Mine - pumping project	2,300,000		\$ 93,023	\$ 400,000	\$200,000	2.2	42%
Office building - lighting, drives, controls	1,490,000		\$ 89,100	\$ 139,900	\$ 50,700	1.0	90%
Industrial Facility - lighting, drives, controls, HVAC	715,700		\$ 38,600	\$ 112,500	\$ 56,000	1.5	61%
Oldcastle (Staker Parsons) - Multi-site industrial customer	2,361,514	11,001	\$295,310	\$ 847,848	\$315,374	1.8	50%
	35,896 gallons oil and diesel						

Examples of Barriers

Customer/Project	kWh saved	Dth saved	Bill savings	Customer cost	Utility incentive	Payback after incentive	ROI
Middle school - commissioning	267,000	2,000	\$ 26,300	\$ 90,000	\$ 52,000	1.4	62%
Convention Center - variable speed drives and controls	2,100,000	15,900	\$176,000	\$ 385,000	\$244,900	0.8	113%

- Projects have been 'on the books' for one to four years, still not budgeted*

Summary

- EE is big business – more than \$200 million a year for utility related efforts and growing
- More than \$100 million a year in *net* economic benefits
- More than 400 additional jobs a year